a software component architecture layer interfacing with an operating system to

control the operations of the computer, the software component architecture layer 5

ing a plurality of computing components; and 6

a network component layer for developing network navigation components that 7

provide services directed to the computer network, the network component layer includes 8

application programming interfaces; and

a first class included in the application programming interfaces to construct a first network navigation object that represents different network resources available on the computer network, wherein the network component layer coupled to the software component architecture layer in integrating relation to facilitate communication among the computing and network navigation components.

- 2. (Amended) The computing arrangement of claim 1 wherein the network naviga-1
- tion components are objects [and wherein the network component layer comprises appli-
- cation programming interfaces delivered in the form of objects in a class hierarchy]. 3

(Amended) The computing arrangement of Claim [3] 1 wherein the application

- programming interfaces further comprise a second class for constructing a second net-
- work navigation object representing a data stream for transferring information among
- objects of the arrangement.

G/. (Amended) An extensible and replaceable layered component computing arrangement for providing services directed to information available on computer net-

10

11

13

14

- works, the computing arrangement comprising:a processor;
- an operating system;

11

12

13

14

15

a software component architecture layer coupled to the operating system to control the operations of the processor, the software component architecture layer defining a plurality of computing components; and

a network component layer for creating network navigation components configured to search and obtain information available on the computer networks, the network component layer includes application programming interfaces; and

means for constructing a network navigation component that represents different resources available on the computer network, wherein the network component layer is integrally coupled to the software component architecture layer to ensure communication among the computing and network navigation components.

- (Amended) The computing arrangement of Claim [9] wherein the application
- 2 programming interfaces comprise means for constructing a network navigation compo-
- nent that implements a protocol.
- (Amended) The computing arrangement of Claim [9] Z wherein the application
- 2 programming interfaces comprise means for constructing a network navigation compo-
- 3 nent that provides additional functionality to existing computing components to enable
- 4 communication among the components.

45

3